

इंटरनेट

मानक

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“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

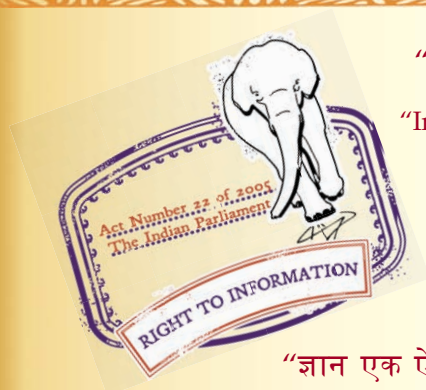
“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 5100 (1969): Twist Drills, Parallel Shanks, Stub Series
for Right hand Cutting [PGD 32: Cutting tools]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

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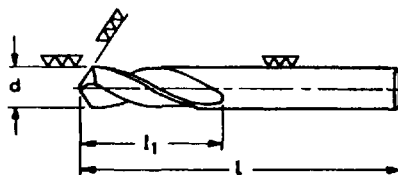
Indian Standard

REAFFIRMED

SPECIFICATION FOR TWIST DRILLS, PARALLEL SHANKS, 2007
STUB SERIES FOR RIGHT HAND CUTTING

1. Scope — Dimensions and requirements for parallel shank twist drills of stub series for right hand cutting

2. Dimensions



All dimensions in millimetres

d h8	Range of Diameters d		l ₁	l	d h8	Range of Diameters d		l ₁	l
	Over	Up to and including				Over	Up to and including		
—	0 19	0 30	1 5	19	3 80	3 75	4 25	22 0	55
—	0 30	0 38	2 0		4 00				
—	0 38	0 48	2 5		4 20				
0 50	0 48	0 53	3 0	20	4 50	4 25	4 75	24 0	58
—	0 53	0 60	3 5	21	4 80	4 75	5 30	26 0	62
—	0 60	0 67	4 0	22	5 00				
—	0 67	0 75	4 5	23	5 20				
0 80	0 75	0 85	5 0	24	5 50	5 30	6 00	28 0	66
—	0 85	0 95	5 5	25	5 80				
—	0 95	1 06	6 0	26	6 00				
—	1 06	1 18	7 0	28	6 20	6 70	7 50	34 0	74
1 20	1 18	1 32	8 0	30	6 50				
—	1 32	1 50	9 0	32	6 80				
1 50	1 50	1 70	10 0	34	7 00	7 50	8 50	37 0	79
—	1 70	1 90	11 0	36	7 20				
1 80	1 90	2 12	12 0	38	7 50				
2 00	2 12	2 36	13 0	40	8 00	8 50	9 50	40 0	84
2 20	2 36	2 65	14 0	43	8 20				
2 50	2 65	3 00	16 0	46	8 50				
2 80	3 00	3 35	18 0	49	9 00	9 50	10 60	43 0	89
3 00	3 35	3 75	20 0	52	9 20				
—	—	—	—	—	9 50				
3 20	3 35	3 75	20 0	52	10 00	10 60	11 80	47 0	95
—	—	—	—	—	10 20				
—	—	—	—	—	10 50				
3 50	3 35	3 75	20 0	52	10 80	10 60	11 80	47 0	95
—	—	—	—	—	11 00				
—	—	—	—	—	11 20				
—	—	—	—	—	11 50				
—	—	—	—	—	11 80				

(Continued)

Adopted 6 February 1969

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BUREAU OF INDIAN STANDARDS
MANAK BHAVAN 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

IS : 5100 - 1969

d h8	Range of Diameters d		l_1	l	d h8	Range of Diameters d		l_1	l
	Over	Up to and Including				Over	Up to and Including		
12 00 12 20 12 50 12 80 13 00 13 20	11 80	13 20	51 0	102	23 75 24 00 24 25 24 50 24 75 25 00	23 60	25 00	75 0	151
13 50 13 80 14 00		14 00	54 0	107	25 25 25 50 25 75 26 00 26 25 26 50	25 00	26 50	78 0	156
14 25 14 50 14 75 15 00	14 00	15 00	56 0	111	26 75 27 00 27 25 27 50 27 75 28 00	26 50	28 00	81 0	162
15 25 15 50 15 75 16 00	15 00	16 00	58 0	115	28 25 28 50 28 75 29 00 29 25 29 50 29 75 30 00	28 00	30 00	84 0	168
16 25 16 50 16 75 17 00	16 00	17 00	60 0	119	30 25 30 50 30 75 31 00 31 25 31 50	30 00	31 50	87 0	174
17 25 17 50 17 75 18 00	17 00	18 00	62 0	123	31 75 32 00 32 50 33 00 33 50	31 50	33 50	90 0	180
18 25 18 50 18 75 19 00	18 00	19 00	64 0	127	34 00 34 50 35 00 35 50	33 50	35 50	93 0	186
19 25 19 50 19 75 20 00	19 00	20 00	66 0	131	36 00 36 50 37 00 37 50	35 50	37 50	96 0	193
20 25 20 50 20 75 21 00	20 00	21 20	68 0	136	38 00 38 50 39 00 39 50 40 00	37 50	40 00	100 0	200
21 25 21 50 21 75 22 00 22 25	21 20	22 40	70 0	141					
22 50 22 75 23 00 23 25 23 50	22 40	23 60	72 0	146					

3. Designation — A stub series twist drill with 5 00 mm diameter of 'tool type' N conforming to this standard and made from high speed steel (HS) shall be designated as:

Twist Drill 5 00 IS : 5100 HS.

3.1 When required with other 'tool types', H or S should be added after size as appropriate.

4. Tolerances — The flute length l_1 and overall length l may vary between the corresponding lengths specified for the preceding and the following ranges of diameters d .

Example.

The flute length for 5 00 mm diameter may vary between the values 24 and 28 mm from a specified value of 26 mm

NOTES

1 In case of range of diameters over 0.19 to 0.3 mm the tolerances on 'h' shall be ± 0.5 mm and for the range of diameters over 0.19 to 0.48 mm the tolerances on 'f' shall be ± 1 mm.

2 In case of range of diameters over 37.5 mm to 40 mm, the tolerances on 'h' shall be ± 4 mm and the tolerance on 'f' shall be ± 7 mm.

5. General Requirements

5.1 'Tool type', unless otherwise specified: *N* according to IS: 5099-1983*.

5.2 The detailed dimensions of the point and the cutting angles shall be at the discretion of the manufacturer (see also IS: 5099-1983* for recommendations regarding 'tool types').

5.3 The diameter *d* shall be measured as near the point as possible.

5.4 The flute length, overall length and tolerances for intermediate diameters shall be selected from the relevant range of diameters.

5.5 Other requirements according to IS : 5099-1983*.

6. Tests — According to IS : 5099-1983*.

EXPLANATORY NOTE

This standard was based on ISO /R 235-1961 which has been reviewed by ISO and found technically suitable for transformation into ISO 235/1-1975. Recently this Indian Standard has also been reviewed and found to be technically identical with ISO 235/1-1975 ' Parallel shank twist drills, jobber and stub series, morse taper shank twist drills and core drills' issued by the International Organization for Standardization.

*Technical supply conditions for twist drills